

AUTHOR INDEX

A

Abel, C. A., 16, 22
 Abelson, J., 220
 Abelson, J. N., 204, 236-38, 240, 246, 267
 Abrass, I. B., 225
 Achtmann, M., 258-63
 Ada, G. L., 18, 30, 35
 Adams, H. R., 48, 50
 Adamson, J. W., 51, 56
 Adelberg, E. A., 239, 262
 Adesnik, M., 205
 Adhya, S., 173
 Adler, K., 149, 150
 Ahlgren, S. K., 122, 126, 127
 Ahmad, M., 112, 118
 Ahmed, A., 112
 Ahmed, S. I., 113, 114
 Akal, H., 75, 78, 94
 Alberts, B. M., 102
 Aldrich, H. C., 73, 92
 Alexander, C., 23, 24
 Allen, N., 49, 50
 Allende, C. C., 248
 Allende, J. E., 248
 Aloni, Y., 235
 Alperin, J. B., 48, 50
 Alpers, D. H., 135
 Altman, S., 239, 240, 248, 250, 251
 Amaldi, F., 204
 Amante, L., 30
 Ames, B. N., 111, 115, 133, 135, 141, 142, 185, 186, 245, 246
 Amiconi, G., 50
 Anderson, E. S., 257, 258, 262, 264
 Anderson, J. W., 59
 Anderson, K., 247, 248
 Anderson, M. E., 50
 Anderson, N. M., 50
 Anderson, P., 215, 218
 Anderson, W. B., 138
 Andoh, T., 239
 Anfinsen, C. B., 144
 Anton, D. N., 141, 245, 246
 Antonini, E., 50
 Antropova, E. N., 101
 Aono, H., 248
 Apirion, D., 198, 204, 210, 214-18, 221, 223
 Appella, E., 5, 7, 23-26, 29
 Arai, J., 199, 282-64
 Arditti, R. R., 137, 184
 Arfin, S. M., 146

Arnone, A., 53

Arnott, S., 235
 Arora, S. K., 151
 Ashwell, M., 236
 Askonas, B. A., 18
 Astrachan, L., 134
 Atkins, J. F., 243
 Attardi, G., 134, 139, 204, 235
 Atwood, K. C., 204, 206, 235
 Aufreiter, E., 261
 Austin, C. M., 18, 30
 Avitabile, A., 176, 178
 Aviv, H., 139
 Awdeh, Z. L., 18

B

Baczko, K., 7
 Baenziger, J., 4
 Baglioni, C., 1, 22, 28, 47-50
 Baker, R. F., 135
 Balibinder, E., 136, 137, 148
 Banerjee, S., 137
 Bank, A., 60
 Bankhurst, A. D., 37
 Barbour, S. C., 140
 Barclay, G. P. T., 48
 Barlow, G. H., 259
 Barnabas, J., 47
 Barnett, D. R., 49
 Barnett, L., 246, 247
 Barnett, W. E., 236
 Barnhart, M. I., 59
 Barnikol, H.-U., 7
 Barr, D., 243
 Barrell, B. G., 204
 Barnett, R. J., 71, 99
 Barry, E. G., 88, 89
 Barth, P. T., 258
 Barton, B. P., 48
 Basilico, C., 210
 Basl, M., 127
 Baur, E. W., 49
 Bautz, E. K. F., 192, 193
 Bautz, F. A., 192, 193
 Beale, D., 47-51
 Bearn, A. G., 6
 Beatty, B. R., 207
 Beaven, G. H., 59, 60
 Bechmann, H., 205
 Beck, R. S., 124
 Beckmann, J. S., 252
 Beckwith, J. R., 133, 135-38, 143, 147, 148, 239
 Beeson, J., 239

Belfort, M., 183, 184
 Belkhodja, O., 50
 Bell, D., 237
 Bell, W. N., 60
 Bellingham, A. J., 49, 50, 55-57, 59
 Benacerraf, B., 36
 Bender, D., 219
 Benditt, E. P., 6
 Benesch, R., 53, 60
 Benesch, R. E., 53, 60
 Benjamin, D., 5, 7
 Bennett, J. C., 16, 28
 Ben-Porat, F., 48
 Bensch, K., 71
 Benveniste, K., 120
 Benzer, S., 162
 Berberich, M. A., 135, 143
 Berenson, M. P., 48
 Beretta, A., 48
 Berg, P., 204, 209, 238-42, 252
 Berggård, I., 6
 Berglund, G., 50
 Bergsma, D., 36
 Berissi, H., 139
 Berlyn, M. B., 112
 Bernadi, A., 216
 Bernhard, W., 99
 Bernhardt, D., 250
 Bernhardt, S., 112
 Bernini, L. F., 48, 51
 Berry, L., 208
 Bertani, G., 157, 184, 186
 Bertani, L. E., 157, 173, 184, 186
 Bertris, J. F., 58
 Beamer, P., 252
 Bessis, M., 58
 Betke, K., 50, 51, 55
 Betlack, M., 239, 240
 Beyreuther, K., 140
 Bezdek, M., 185, 186
 Bhorjee, J. S., 144
 Blanco, G., 48
 Blidwell, R. G. S., 127
 Bierme, R., 50
 Bigelow, B., 6, 29
 Blozzi, G., 36
 Birge, E. A., 204, 214, 215, 217, 223
 Birnbaum, L. S., 204, 206
 Birnstiel, M., 207
 Birnstiel, M. L., 207
 Birshtein, B., 5, 7
 Bishop, J. O., 207
 Bjare, U., 214, 215
 Björk, I., 31

AUTHOR INDEX

- Blackwell, R. Q., 48-50
 Blattner, F. R., 136, 147, 148
 Block, R., 136, 137, 139, 141
 Blommsma-Jonkman, F., 139
 Blume, A. J., 138, 137
 Bockrath, R. C., 219
 Bode, V. C., 161
 Boettinger, J. K., 136, 147, 148
 Bogdanov, Y. F., 101
 Bohme, H., 214, 215
 Bol-Doku, F. S., 50
 Boigne, J. M., 50
 Bolle, A., 158, 159, 239
 Boilen, A., 215, 222
 Bolton, W., 47-49, 52, 56
 Bonaventura, J., 49, 50, 55, 56
 Bookchin, R. M., 48, 58, 59
 Boon, W. H., 48, 50
 Boram, W., 220
 Borek, E., 252
 Bosch, L., 139
 Botha, M. C., 48
 Bouquet, M., 173, 174, 176, 180
 Bourgeois, S., 139, 140, 143, 144, 149
 Bourguignon, M.-F., 173, 174, 176, 180
 Bowman, B. H., 49
 Boyce, R. P., 174
 Boyd, J. S. K., 186
 Boyer, S. H., 48, 50
 Brachet, P., 168, 177, 178, 180
 Bradley, T. B., 48, 51
 Bradshaw, R. A., 7, 23
 Brain, M. C., 50, 55
 Brandt, N. J., 48
 Bratu, V., 49
 Braun, D. G., 7
 Braun, M., 7
 Breckenridge, L., 210, 215
 Bremer, H., 208
 Brenner, D. J., 235, 244, 252
 Brenner, M., 133, 141, 142, 245, 246
 Brenner, S., 134, 204, 209, 238-40, 246-48, 257, 258
 Bretton, G. J., 58
 Briehl, R. W., 53
 Brimhall, B., 48-51
 Brinkley, B. R., 72, 75, 89, 93
 Brinton, C. C., 257, 259-61
 Broda, P., 208, 209
 Broda, P. M., 257-59, 263, 264
 Brody, E., 158, 159
 Brody, S., 127
 Brooks, K., 165
 Brown, A. K., 49
 Brown, D., 48
 Brown, D. D., 28, 207, 208, 235
 Brown, K. D., 135, 146
 Brownlee, G. G., 204, 205, 224
 Brownstein, B. L., 214, 215, 223
 Brunori, M., 50
 Brunovskis, I., 193, 194, 196, 197
 Brutlag, D., 174
 Bryant, R., 48
 Buck, A. A., 48
 Buck, C. A., 220
 Bunn, H. V., 53
 Burdon, R. H., 250
 Burger, M., 135
 Burger, E. T., 50
 Burgess, R. R., 208
 Burgh, E., 161
 Burgoine, L., 113
 Burnet, F. M., 17, 37
 Burns, R. O., 145
 Burstein, C., 144
 Burton, E. G., 121, 123, 127
 Butler, B., 161, 169-71, 173, 185
 Buttin, G., 146
 C
 Cabannes, R., 50
 Calef, E., 169, 174, 176-78, 181
 Calendar, R., 158
 Callahan, R., 136, 137
 Calvo, J. M., 111, 112, 117, 133, 145
 Camp, F. R., 59
 Campbell, A., 165, 180, 183
 Cantor, D. R., 151
 Capecci, M. R., 239
 Capra, J. D., 7, 17, 31
 Carbon, J., 238, 241-43
 Carlson, K., 219
 Caro, L., 209, 259
 Carrell, R. W., 47, 49, 50, 54, 55
 Carruette-Valentin, J., 74, 92
 Carziotis, M., 118
 Cartwright, E., 205, 224
 Case, M. E., 112-15, 118, 119, 123
 Cashel, M., 209, 252
 Cashmore, A., 247, 248
 Catcheside, D., 112
 Catcheside, D. E. A., 115
 Cavalli, L., 261
 Cavalli-Sforza, L., 210
 Cebara, J. J., 4, 5, 7
 Cerami, A., 59
 Cesari, I. M., 7, 17, 23, 32
 Chadwick, P., 163
 Chaleff, R., 118
 Chalmers, J. H., Jr., 112
 Chamberlin, M., 192, 193
 Chambers, D. A., 133
 Chambers, R. W., 235
 Chan, T.-S., 239, 241
 Chang, A. C. Y., 184
 Chang, F. N., 211
 Chang, G. W., 246
 Changex, J.-P., 52
 Chapelville, F., 237
 Charache, S., 48, 50, 58, 59
 Chargaff, E., 206
 Charlesworth, D., 47, 48
 Chater, K. F., 141
 Chen, B., 136, 137, 139, 147
 Chen, G. S., 122
 Cheng, P. Y., 163
 Cheong, L., 251
 Chersi, A., 5, 23-26, 29
 Chung, P. L. Y., 124
 Clark, A. J., 135, 165, 258-63
 Clark, B. F. C., 247
 Clarkson, S. G., 237
 Clason, A. E., 250
 Claus, C., 72
 Cleary, T. J., 118
 Clegg, J. B., 7, 48-50, 54, 55
 Clemetson, K. J., 144
 Clewell, D. B., 257, 259, 264
 Clooney, R. A., 73, 92
 Clowes, R. C., 257-59, 261, 263, 264
 Cohen, A., 259
 Cohen, S. N., 184, 264, 265
 Cohen-Bazire, G., 140
 Cohn, M., 6, 7, 17, 23, 29, 32, 122, 133, 139, 140, 143, 144
 Coleman, R. D., 50
 Coll, W., 207, 208
 Collins, J., 258
 Cummings, D. E., 72, 75, 85, 90, 91, 93, 97, 99, 104
 Conley, C. L., 58, 59
 Conway, T. P., 23, 25
 Cook, K. A., 120
 Cooke, M., 260, 261, 263, 264
 Cooper, H. L., 221
 Cooper, J. E. K., 72, 75, 89, 93
 Corredor, J., 141
 Corte, G., 224
 Cortesse, R., 141
 Costea, N., 18
 Court, D., 165, 180
 Couturier, M., 173, 210
 Cox, E. C., 210, 217

- Cox, J. H., 169
 Cox, J. M., 47-49, 52
 Cramer, F., 235
 Crapo, L., 137, 140
 Craven, G. R., 144, 210, 217
 Creaser, E. H., 112
 Crick, F. H. C., 113, 235, 245
 Crocken, B. J., 126
 Croes, E. F., 73, 92
 Crookston, J. H., 48
 Crosby, E. F., 48
 Cross, A. M., 1, 8, 19, 28
 Crowther, R. A., 53
 Cunningham, B. A., 7
 Cunningham, J. E., 49
 Curry, J. B., 242
 Curtiss, R., 257, 259, 262, 263
 Cutler, R. G., 206, 244
 Cuzin, F., 257-60
- D
- Dacie, J. V., 49, 55
 Dahlberg, J. E., 147, 148, 205, 223, 224
 Dalton, A. J., 71
 Dambly, C., 173
 Dance, N., 60
 Daniel, V., 236, 251, 252
 Danon, F., 6, 29
 Darlington, C. D., 90, 95, 96
 Darnell, J. E., Jr., 204, 250
 Datta, N., 257-59, 261-64
 Dausser, J., 37
 David, G. S., 24, 29
 Davidson, H., 146
 Davidson, N., 264, 265
 DAVIES, J., 203-34; 119, 140, 210, 211, 215, 216, 218, 222
 Davies, J. E., 224
 Davies, J. W., 139
 Davis, B. D., 210, 214, 215
 Davis, R. H., 112, 127
 Davis, R. W., 158, 192-94, 196, 197
 Davison, J., 163, 184
 Dawson, G. W. P., 38
 Dayhoff, M. O., 7
 De Crombrugge, B., 137, 141, 147
 De Hauwer, G., 139
 De Jong, W. W. W., 48, 51
 Dekio, S., 212, 215, 217
 Delaney, R., 7, 16, 25, 32
 de la Rosa, O., 186
 Delbrück, M., 191
 del Giudice, L., 176, 178
 Demerec, M., 111, 135, 191, 262
 DeMoss, J. A., 112
 Denhardt, D. T., 184
 De Robichon-Szulmajster, H., 111
 Desmet, L., 210
 Deusser, E., 214, 223
 Deverson, E. V., 7, 17
 DeVries, J. K., 264
 Dharmgrongartama, B., 197
 Dietrich, P. S., 123
 Diggs, L. W., 58
 Dill, B. C., 100
 Dingman, C. W., 205
 Döbereiner, H. G., 205
 Döbler, J., 58
 Doctor, B. P., 235, 244, 252
 Doi, R. H., 259
 Dondon, J., 139
 Doolittle, R. F., 16, 32
 Doolittle, W. F., 207, 208
 Dorrrington, K. J., 31
 Douglas, H. C., 112
 Dove, W. F., 161, 173, 191
 Doyle, C. H., 115, 146
 Dozy, A. M., 48
 Drake, J., 111
 Dray, S., 23-25
 Dressler, D. H., 184
 Dreyer, W. J., 7, 16, 28, 32
 Dubinski, S., 23-25, 29
 Dubnau, D., 204, 206, 207, 209, 210, 215, 216, 235, 244, 258
 Duerst, M., 48
 Duffus, J. H., 100
 Duke, S. K., 139
 Dunet, R., 48
 Dunn, J. J., 192, 193
 Duranton, H. M., 237
 Dutcher, T. F., 18, 36
 Dutton, R. W., 37
 Dwyer, S. B., 145
 Dziorana, M., 210
- E
- Ebel, J. P., 204
 Eberhart, B. M., 124, 125
 ECHOLS, H., 157-90; 28, 36, 148, 157, 159, 161, 163, 165, 169-75, 184, 185
 EDELMAN, G. M., 1-46; 1, 6, 7, 16, 26, 28, 32, 34, 35
 Edén, U., 74, 86, 98
 Edin, G., 208, 209
 Edwards, D. L., 127
 Edwards, M. J., 50, 55, 56
 Efremov, G. D., 49, 50
 Efron, M. L., 48-50, 57
 Egawa, R., 262, 263
 Eggertsson, G., 239
 Ehresmann, C., 204, 205, 224
 Eichmann, K., 5, 17, 26, 35
 Eidlitz, L., 145, 252
 Ell, C., 225
 Ein, D., 16, 21
 Elrich, F., 58
 Eisen, H. A., 169, 175-78, 180, 184
 Eisen, H. N., 7, 23
 Emerson, S., 127
 Emmer, M., 137
 Endo, H., 210, 215, 238
 Engels, F. M., 73, 92
 Englehardt, D. L., 239
 Englesberg, E., 133, 135, 136, 142, 144
 Enoki, Y., 53
 Epstein, R. H., 158, 159
 Epstein, W., 136
 Erdmann, V. A., 205, 224
 Erdos, T., 210
 Ericson, M. C., 112
 Erikson, N., 6
 Eron, L., 136, 137, 139, 141, 148
 Espsonda, P., 74, 75, 87, 93, 99
 Evans, J. E., 206, 244
 Evenchik, Z., 263
 Everett, G. A., 244
- F
- Fahey, J. L., 18, 36, 37
 Fairbanks, V. F., 50
 Fairfield, S. A., 236
 Fankhauser, D. B., 118, 138
 Fano, U., 191
 Farquharson, H. A., 48
 Fein, A., 113
 Feldman, H. M., 121
 Feldman, J. F., 127
 Felicetti, L., 216
 Fellner, P., 204
 Fellows, R. E., Jr., 7, 16, 25, 32
 Ference, M., 143
 Ferretti, J. J., 241
 Fessas, P. H., 60
 Feunteun, J., 223
 Flandt, M., 252
 Fields, R., 23
 Filippovich, I. I., 236
 Finch, C. A., 50, 55-57
 Fincham, J. R. S., 119
 Finegold, I., 18, 36
 Flink, G. R., 111, 112, 117, 133, 141, 245, 246
 Finnegan, D. J., 262, 263
 Fisher, C. E., 7
 Fitch, W. M., 1, 7, 28, 34
 Flaks, J. G., 204, 210, 211, 214, 215, 217
 Flatz, G., 47

AUTHOR INDEX

- Flavell, R. B., 120, 127
 Flavin, M., 121
 Fleischman, J. B., 5, 7, 26, 29
 Fling, M., 121
 Florent, G., 24
 Folt, J. W., 236
 Forchhammer, J., 224
 Forni, L., 30
 Foulds, J., 204, 238, 242
 Fournier, M. J., 235, 244, 252
 Fowler, A. V., 144
 Fraenkel, D. G., 137
 Frangione, B., 6, 16, 22, 24, 29, 30
 Franklin, E. C., 6, 16, 29, 30
 Franklin, N. C., 134, 135, 139, 264
 Fredericq, P., 258, 261
 Freundlich, M., 145, 246
 Frey, L., 102
 Frick, P. G., 50, 55
 Froehner, S. C., 121
 Fruchter, R. G., 7, 25
 Fry, B. A., 183
 Frydman, A., 258, 262, 263
 Fudenberg, H. H., 1, 7, 16, 17, 28, 30
 Fuerst, C. R., 175
 Fujii, T., 250, 260
 Fujita, S., 50
 Fujiwara, N., 49
 Fukasawa, T., 262, 263
 Fuller, G. F., 48
 Funatsu, G., 214, 215, 223
 Funderburgh, M. L., 147, 148
 Funk, D., 49
- G
- Gabuzda, T. G., 60
 Gaertner, F. H., 112
 Gaffney, P. J., Jr., 49
 Gafford, R. D., 118
 Gajdusek, D. C., 48
 Gall, W. E., 1, 26
 Gallant, J., 209
 Gallo, E., 48-50
 Galluci, W., 247
 GALLY, J. A., 1-46; 1, 26, 28, 32, 34, 35
 Ganem, D., 149
 Garen, A., 239, 241
 Garen, S., 239
 Garner, F. H., 7
 Garren, L. D., 225
 Garrett, M. K., 125
 Garry, B., 135
 Gartland, W. J., 241
 Gartner, T. K., 210, 239, 240
 Garver, F. A., 1, 28, 31
- Garvin, R. T., 215
 Gassner, G., 71, 75, 94
 Gauss, D. H., 235
 Gayle, E. E., 48, 50
 Geffter, M. L., 204, 246, 247
 Geiduschek, E. P., 208
 Gell, P. G. H., 23, 25
 Gerald, P. S., 48-50, 57
 Gessner, U., 48
 Gesteland, R. F., 239
 Ghosh, S., 148, 163, 184
 Ghysen, A., 248
 Giacomoni, D., 235
 Giblett, E. R., 47
 Gibson, D., 16, 21
 Gielow, L., 144
 Gierer, A., 151
 Gilbert, W., 133, 137, 139, 140, 143, 149
 Giles, N. H., 112-15, 118-20, 123
 Gilette, P. N., 59
 Gill, G. W., 225
 Gillespie, E. B., 58
 Gillies, C. B., 73, 77, 79, 85, 88, 89
 Gilman-Sachs, A., 23-25
 Gilmore, R. A., 244
 Giménez-Martin, G., 74
 Gingery, R., 165
 Glandorff, N., 145
 Glaser, D. A., 209
 Gleason, M. K., 126, 127
 Glenner, G. G., 6
 Goaman, L. C. G., 47-49, 52
 Gold, L., 238, 241
 Goldberg, A. I., 48
 Goldberger, R. F., 111, 115, 133, 135, 141-43
 Goldschmidt, A. A., 258
 Goldthwaite, C., 210, 215, 216
 Good, R. A., 36
 Goodall, P. T., 49-51
 Goodman, H. M., 235, 238-40, 246-48
 Gopinathan, K. P., 239
 Gordon, J., 216
 Gordon, S., 50
 Gorelic, L., 198, 206
 Gorini, L., 135, 210, 212, 214, 215, 218, 235, 237, 238
 Gotchel, B., 173
 Gottesman, M. E., 138, 161, 165
 Gottlieb, A. J., 48
 Gottlieb, P. D., 22
 Gough, M., 185, 186
 Grant, J. A., 17, 20
 Grant, R. C., 151
 Gratzner, H., 124, 125
 Gray, W. R., 7, 16, 32
 Greaves, M. F., 18, 36, 37
- Green, B. R., 177
 Green, L., 170, 171, 175
 Green, M., 165, 214, 223
 Green, M. H., 173
 Green, M. M., 38
 Greenblatt, J., 144, 158
 Greene, R., 197
 Greer, J., 47, 53-57
 Grell, E. H., 245
 Grey, H. M., 16, 22, 31, 32
 Grimberg, J. I., 252
 Grindley, J. N., 262
 Grobben, K., 72
 Grodzicker, T., 184
 Groner, Y., 139
 Gros, J., 134, 139, 161, 169, 173, 174, 176, 180, 252
 Gross, J., 258
 Gross, S. R., 111-13, 116-18
 Grubbs, R., 20
 Grumet, F. C., 36
 Grunberg-Manago, M., 139
 Guarneros, G., 165
 Guénin, A. H., 75, 92
 Guha, A., 173
 Guitart, J., 48
 Gundersen, W., 135
 Gunn, R. B., 60
 Gupta, N. K., 241, 242
 Gurdon, J. B., 29, 235
 Gussin, G. N., 239
 Guthrie, C., 204, 221, 222
 Guttmann, B. S., 135
- H
- Haenni, A.-L., 237
 Hahn, E. V., 58
 Halaban, R., 127
 Halbrecht, I., 48
 Halbreich, A., 236
 Hall, M. D., 49
 Hallick, L., 174
 Halpern, M. S., 4
 Halsall, D. M., 115
 Halvorson, H., 125
 Halvorson, H. O., 235
 Hamers, R., 23, 24
 Hamers-Casterman, C., 23, 24
 Hamilton, H. B., 50, 51
 Hamkalo, B. A., 207, 208
 Hampson, R., 50
 Hanada, M., 50
 Harada, M., 6
 Hardy, S. J. S., 210, 217, 218
 Harford, N., 210, 215, 216, 218
 Hargrove, W. F., 173
 Härlie, E., 194-96, 199
 Harris, J. W., 58
 Harshman, R. B., 209
 Hartman, J. R., 50, 54, 55

- Hartman, P. E., 111, 115, 141, 243, 245, 262
 Haselkorn, R., 208
 Haseltine, W. A., 209
 Hashimoto, K., 210, 212, 214, 258
 Haskins, E. F., 73, 92
 Hasunuma, K., 126
 Hathaway, A., 184
 Hatlen, L. E., 235
 Haugli, F., 173
 Hauschild-Rogat, P., 225
 Hausmann, R., 191, 192, 194-96, 199
 Hawthorne, D. C., 112, 244
 Hay, J., 237
 Hayashi, A., 48-51, 55-57
 Hayashi, M., 134, 139
 Hayashi, N., 51
 Hayes, D., 205, 224
 Hayes, R., 205, 224
 Hayes, W., 263
 Heath, S., 243
 Hecht, F., 50, 54, 55
 Hecht, N. B., 102, 205
 Hedges, R. W., 258, 259, 262, 264
 Heinemann, S. F., 161, 174, 176, 181
 Heintz, C., 73
 Held, W., 222
 Helinski, D. R., 241, 257-59, 264
 Hélène, C., 151
 Heller, P., 18, 47, 50, 57
 Helser, T., 215, 222, 224
 Hendershot, J., 173
 Henderson, S. A., 106
 Henry, R. L., 59
 Heremans, J. F., 16, 22
 Herman, A., 125
 Herrlich, P., 195, 196
 Hershey, A. D., 157, 161
 Herskowitz, I., 161, 173
 Hertman, I., 165
 Herzberg, M., 252
 Herzenberg, L(eonard) A., 22, 37
 Herzenberg, L(eonore) A., 22, 37, 135
 Herzog, A., 215
 Hess, M., 7, 16, 21
 Hijmans, W., 18
 Hill, C. W., 204, 238, 242
 Hill, R. J., 50
 Hill, R. L., 7, 16, 25, 32, 48, 49
 Hilschmann, N., 6, 7, 16, 17, 21, 28, 31
 Hinchee, A. A., 73, 92
 Hirota, Y., 257-63
 Hirsh, D., 238, 241, 247
 Hite, R., 49
 Hitzig, W. H., 50, 55
 Hoar, D. I., 141, 263
 Hofemeister, J., 214, 215
 Hofnung, M., 144
 Hogg, N. M., 7, 22
 Hohn, B., 257, 259
 Hollan, S. R., 48
 Holland, J. J., 220
 Hollande, A., 74, 92
 Hollander, A., 50
 Holmes, R. K., 198
 Hong, J.-S., 185, 186
 Hood, L. E., 1, 5, 7, 16, 17, 20, 21, 28, 31, 32, 34, 35
 Hooper, M. L., 247, 248
 Hopkins, N., 163, 176, 181, 182
 Hopper, J. E., 30
 Horiochi, T., 140
 Horn, V., 241, 242
 Horowitz, N. H., 121
 Hotta, Y., 100-5
 Howard, B. D., 162
 Howard, K. L., 73
 Howell, S. H., 102, 105
 Hoyle, M. N., 127
 Hradecna, Z., 161, 174
 Hsu, T. C., 72, 75, 89, 93
 Hsu, W., 139
 Hsu, W.-T., 236
 Huang, H. H., 193
 Huang, R.-C. C., 29
 Huehns, E. R., 47, 49, 50, 54-56, 59, 60
 Huisman, T. H. J., 48-51
 Hunter, E., 50
 Huntsman, R. G., 48
 Hurez, D., 6, 29
 Hutchinson, H. E., 50
 Hyde, R. D., 48
 Hyman, R. W., 192-94, 196, 197
 Ihler, G., 259
 Ikeda, H., 159, 252
 Im, S. W. K., 146
 Imai, K., 50, 57
 Imamoto, F., 135, 214
 Imamura, T., 50
 Inge-Vechtomov, S. G., 244
 Ingraham, J., 204, 222
 Ingraham, L., 161
 Ingram, V. M., 33, 47-49
 Inman, R. B., 173
 Inokuchi, H., 173, 248
 Ippen, K., 136, 137, 143, 261-63
 Irr, J., 135, 142
 Irvine, D., 48-51
 Isaacs, L. N., 163, 165
 Isaacs, W. A., 48, 50
 Isersky, C., 6
 Ishibashi, M., 259-61
 Ishida, T., 241
 Ishikawa, M., 210
 Ishikawa, T., 128
 Ishizawa, M., 238
 Itano, H. A., 48, 58
 Ito, J., 241, 242
 Ito, M., 100, 101
 Iuchi, I., 48-51, 57
 Iverson, G. M., 36, 37
 Iyer, R. V., 258, 259
- J
- Jackson, R. W., 112
 Jackson, S. A., 5, 7, 25, 26
 Jacob, F., 122, 133-37, 139, 140, 143, 148, 163, 165, 169, 173, 175-78, 180, 257-60
 Jacob, H., 55
 Jacob, H. S., 55
 Jacob, M., 259
 Jacobs, A. S., 48-50
 Jacobson, K. B., 235
 Jacoby, G. A., 215
 Jacquet, M., 134
 Jaffé, E. R., 57
 Jakes, K., 196, 199
 Janin, J., 197
 Jarry, B., 204-6
 Jarvis, J. M., 7
 Jaworska, H., 92
 Jenkins, T., 49
 Jerne, N. K., 1, 28, 32, 37
 Jersild, R., 73
 Jim, R. T. S., 48
 Jiminez, A., 218
 Jobe, A., 140, 144, 149
 Johnson, L., 252
 Jolit, M., 140
 Jones, K., 207
 Jones, R. F., 118
 Jones, R. T., 48-51
 Jordan, E., 135, 208
 Joslin, F. G., 22
 Joyner, A., 165, 169-71, 185
- K
- Kabat, D., 225
 Kabat, E. A., 17
 Kadner, R. J., 126
 Kaempfer, R. O. R., 134
 Kahn, P., 258, 263, 264
 Kaiser, A. D., 161, 163, 165, 168, 170, 171, 176, 178, 179
 Kajii, H., 211
 Kalbacher, B., 209, 252
 Kalickar, H. M., 135
 Kaltenborn, S. H., 127
 Kaltschmidt, E., 210, 222
 Kamen, R. I., 209
 Kamra, O. P., 98

AUTHOR INDEX

- Kang, S.-S., 214
 Kano, Y., 214
 Kano-Sueoka, T., 237
 Kaplan, A. P., 16, 28
 Kaplan, S., 204, 206, 239
 Kashmiri, S. V. S., 116
 Kataja, E., 210
 Kehoe, J. M., 17
 Kelbman, J. R., 37
 Kellenberger, G., 168
 Keller, J., 4
 Kellermeyer, R. W., 58
 Kellogg, D. A., 244
 Kells, S. J., 236
 Kelly, T. J., 150
 Kelus, A. S., 23, 25
 Kendrew, J. C., 48, 49, 52
 Kennel, S., 173
 Kepes, A., 134, 135, 144
 Kerr, D. S., 121
 Kessler, D. P., 204, 222
 Keyhani, E., 252
 Khan, P. M., 48
 Khatoon, H., 258, 259
 Khorana, H. G., 241, 242, 252
 Khuri, P. D., 50
 Kihio, Y., 135
 Kikuchi, G., 51
 Killen, K., 183
 Kilmartin, J. V., 47, 51
 Kim, J. S., 236
 Kinderlerer, J. L., 47-49
 Kindt, T. J., 29
 King, M. A. R., 50
 King, R. C., 75, 78, 89, 94, 98, 104
 Kingsma, S., 50
 Kinoshita, T., 216
 Kinsey, J. A., 118
 Kinsky, S. C., 120
 Kirk, R. L., 48
 Kitchens, J. L., 50
 Kjeldgaard, N. O., 208, 219
 Kleihauer, E. F., 48, 51
 Klein, J., 37
 Knight, K. L., 23
 Knopf, P. M., 29
 Kobra, M. J., 120
 Kochwa, S., 7, 16, 28
 Köhler, H., 7, 16, 28
 Kohn, A., 6, 18
 Kolber, A., 142
 Koler, R. D., 48, 50
 Kolin, V., 134
 Konigsberg, W., 7
 Konotey-Ahulu, F. I. D., 49, 50
 Konrad, M. W., 172
 Korn, D., 197, 257
 Kornberg, A., 174
 Kornfeld, R., 4
 Kornfeld, S., 4
 Koshland, M. E., 4, 24, 26, 29, 35
 Kosower, E. M., 59
 Kosower, N. S., 59
 Kossman, C. R., 208
 Kourilsky, P., 161, 173, 174, 176, 180
 Kovach, J. S., 133, 135, 141-43
 Kowallik, K., 73
 Kraus, A. P., 48, 59
 Kraus, L. M., 48, 59
 Krause, R. M., 5, 17, 25, 26, 35
 Kreider, G., 214, 215, 223
 Krembel, J., 216
 Kühn, A., 72
 Kumar, S., 137, 161, 174, 180, 181
 Kung, H. K., 244
 Kunkel, H. G., 7, 16, 22, 31
 Kurahashi, K., 135
 Kurland, C. G., 203, 204, 210, 214, 215, 217, 223
 Kuwano, M., 198, 210, 215, 216
 Kvitek, K., 211
 Kwan, C. N., 198
 Kynoch, P. A. M., 48
- L
- Lable, D., 50
 Lackland, H., 5, 17, 26, 35
 LaCour, L. F., 71, 74, 89, 90, 91, 98, 99
 LaCourse, P. C., 59
 Lacy, A. M., 118
 Lagnaux, S., 23, 24
 Lai, C. J., 216, 224
 Lal, B. M., 250
 Lambert, L., 175
 Landucci-Tosi, S., 29
 Landy, A., 204, 238-40, 246-48
 Lane, C. D., 29
 Lange, R. D., 58
 Langer, B., 7
 Lanka, E., 239
 Lannan, J. E., 239, 240
 Largen, M., 144
 Larson, J. E., 151
 Lavallé, R., 139
 Lawn, A. M., 259-61, 263, 264
 Lazzarini, R. A., 209
 Leberberg, E. M., 261
 Lebovitz, H. E., 7, 16, 25, 32
 Leboy, P. S., 204, 215, 217
 Ledbetter, M. C., 74
 Ledderhose, G., 17
 Leder, P., 216
 Lederberg, E. M., 210
 Lederberg, J., 140, 210, 261
 Lee, N., 135, 142
 Lee-Huang, S., 139
 Legrand, L., 37
 Lehman, J., 126, 127
 Lehmann, H., 47-51, 53-56, 58
 Leibowitz, M. J., 225
 Leighton, T. J., 100
 Leive, L., 134
 Lelong, J. C., 139
 Lenfant, C., 55-57
 Lenzyel, P., 210
 Lennette, E. T., 198
 Lennox, E. S., 29, 32
 Leonhard, T., 50
 Lesley, J. F., 37
 Lessin, L. S., 58
 Lester, G., 118
 Levanson, M., 16, 21
 Levin, A. S., 30
 Levine, M., 157, 184-86
 Levinthal, C., 197, 205
 Levitt, M., 247
 Lewandowski, L. J., 214, 223
 Lewis, J. A., 141
 Libnoch, J. A., 18
 Lichter, E. A., 23, 25
 Lidell, J., 48
 Lieb, M., 165, 183
 Lieberman, R., 22, 37
 Liebold, W., 7
 Lie-Injo, L. E., 48
 Likover, T. E., 214
 Lima-de-Faria, A., 92
 Lin, S., 149
 Lindahl, G., 142, 186
 Lines, J. G., 48
 Linial, M., 192, 198, 199, 261
 Linial, M. L., 193, 197, 198
 Lipman, M. B., 257, 259
 Liquori, A. M., 58
 Lisker, R., 48
 Littauer, U. Z., 236, 251, 252
 Littlewood, B., 218
 Litwin, S. D., 16, 22
 Liu, C. S., 48-50
 Livingstone, F. B., 47, 51
 Loebel, J. E., 244
 Loening, U. E., 207
 Longo, D., 224
 Lorkin, P. A., 48-50
 Losick, R., 158
 Lowendorf, H. S., 126
 Lowenstein, J., 6, 29
 Lowry, C. V., 205, 223, 224
 Lozerton, H. A., 147, 148
 Lu, B. C., 72, 73, 88, 90, 91, 96, 124
 Luria, S. E., 134, 135, 139, 155

- Lusher, J. M., 59
 Luzzati, D., 161, 173
 Luzzato, L., 214
 Lwoff, A., 157
 Lynch, R. G., 7, 23
- M
- Maaløe, O., 208, 219, 221
 Maas, W. K., 135, 258, 264
 MacDonald, R. E., 224
 MacDougall, S., 49-51
 Mace, M. L., Jr., 72, 75, 89, 93
 MacFarren, A. C., 258, 259, 261
 MacHattie, L. A., 184, 197
 MacKechnie, C., 235
 Mackie, G., 146
 Madison, J. T., 244
 Maekawa, M., 49
 Maelicke, A., 235
 Magasanik, B., 133, 134, 137, 142, 147
 Mage, R. G., 23-25, 29, 30
 Mahadevan, P. R., 125
 Mahadik, S. P., 197
 Maitra, U., 192, 193, 195
 Maizel, J. V., Jr., 191, 192, 197
 Mäkelä, O., 1, 18, 19, 28
 Makman, R. S., 137
 Malamy, M. H., 192, 199, 258, 261
 Maldonado, J. E., 50
 Maleknia, N., 48
 Malik, V. S., 186
 Maling, B. D., 241
 Mandy, W. J., 23-25, 29
 Mangiarotti, G., 218
 Mann, D. L., 37
 Mannick, M., 31
 Manning, J. M., 59
 Mantel, N., 169-71, 185
 Manton, I., 73
 Marbaix, G., 29
 Marcraud, L., 161
 Marchelli, C., 176, 178
 Marengo-Rowe, A. J., 48, 49
 Margolin, P., 133, 137
 Margulies, A. D., 259
 Markovitz, A., 141, 146
 Marks, A., 252
 Marks, P., 60
 Marmur, J., 204, 206, 207, 209, 235
 Marrs, B. L., 134, 198
 Martin, B. T., 250
 Martin, R. C., 135
 Martin, R. G., 111, 115
 Marvin, D. A., 259
 Marzluff, G. A., 121, 122
 Masters, M., 209
 Masuda, T., 165
- Masukawa, H., 216
 Matchett, W. H., 120
 Matsubara, K., 259
 Matsuda, G., 49
 Matsuka, M., 51
 Mattoccia, E., 216
 May, A., 59
 Mayuga, C., 217
 Mazza, U., 48
 Mazzarella, L., 52, 53
 McCarthy, B. J., 220
 McClain, W., 236
 McClintock, B., 38
 McDevitt, H. O., 22, 36, 37
 McGrath, J., 192, 193
 McIntosh, R., 48
 McLaughlin, C. L., 16, 29
 McLaughlin, D. J., 73
 McMacken, R., 169-71, 185
 Meacock, P., 264
 Meier, D., 217
 Melzer, M., 6, 29
 Menra, T., 176, 178
 Menzel, M. Y., 97, 98
 Mergeay, M., 145
 Meronk, F., 144
 Meselson, M., 134
 Meshaka, G., 29
 Metcalfe, J., 50, 55, 56
 METZENBERG, R. L., 111-32; 121-24, 126, 127
 Metzger, H., 6, 16, 28
 Meynell, E., 257, 258, 261-64
 Meynell, G. G., 199, 257-59, 261-64
 Michel, M., 30
 Michelitsch, B., 17
 Midgeley, J. E. M., 251
 Mihaesco, C., 29
 Mihaesco, E., 6, 29
 Mihara, K., 51
 Miller, C. G., 238, 241
 Miller, D. R., 55
 Miller, J. H., 133, 136-38, 143, 147, 149
 Miller, R. C., 252
 Millette, R. L., 195, 196
 Milner, P. F., 50
 Milstein, C., 1, 6, 7, 16, 17, 22, 24, 28, 29
 Milstein, C. P., 7, 17
 Mims, C. W., 73, 92
 Minnich, V., 50
 Minson, A. C., 112
 Mironova, L. N., 244
 Mitchell, C. B., 48
 Mitchison, J. M., 58
 Mitsuhashi, S., 224
 Miyaji, T., 48-51, 57
 Mizushima, S., 210, 211, 215, 221-23
 Mobach, H. W., 260, 261
 Modolell, J., 210
 Moens, P. B., 72, 74, 75, 78, 85, 88-94, 96, 98
 Moie, L. E., 5, 7, 25, 26
 Möller, W., 225
 Momose, H., 212
 Mondzac, A. M., 48
 Monesi, V., 101
 Monier, R., 223
 Monn, E., 49
 Monod, J., 52, 122, 133-37, 139, 140, 143, 144
 Moody, E. E. M., 263, 264
 Moore, C. V., 58
 Moore, G. E., 18, 38
 Moore, L., 165
 Moore, R. T., 73
 Moore, V. G., 7, 16, 28
 Moores, R. R., 48
 Mora, G., 203
 Morell, P., 204, 206, 207, 235, 244
 Morikawa, N., 135
 Morimoto, H., 49, 50, 54-57
 Morowitz, H. J., 235
 Morris, V. L., 237
 Morrison, T. G., 192, 199, 258
 Mortimer, R. K., 244
 Moses, M. J., 71-73, 90-94, 99
 Motulsky, A. G., 49, 50, 54, 55
 Mowshowitz, D. B., 250
 Muirhead, H., 47-49, 52, 53
 Muller, C. J., 47, 50
 Müller-Hill, B., 133, 137, 139, 140, 143, 149
 Munkres, K. D., 120
 Munro, A. J., 1, 28
 Murayama, M., 58
 Mustafa, D., 48, 50
 Muto, A., 206, 220
 Myers, M. G., 124
- N
- Nagel, R. L., 48-50, 58, 59
 Nalbandian, R. M., 59
 Namboodiri, A. N., 124
 Naono, S., 134, 139, 165, 169, 252
 Nashimoto, H., 204, 214, 215, 218, 221-23
 Nass, M. M. K., 236
 Nathan, D. B., 60
 Nathans, D., 134
 Natvig, J. B., 16, 22
 Nau, M. M., 216
 Naughton, M. A., 48-50, 50
 Nazario, M., 118
 Neidhardt, F. C., 145, 252
 Nelson, O. E., 38
 Neubauer, Z., 169, 176-78

AUTHOR INDEX

- Newby, R. R., 139, 140, 143
 Newman, A., 209
 Nichols, B. M., 59
 Niederpruem, D. J., 73
 Nierhaus, K., 215
 Nilan, R. A., 74, 86, 98
 Nishida, H., 199, 262-64
 Nishimura, Y., 259-62
 Nisonoff, A., 30
 Nissley, S. P., 138
 NOMURA, M., 203-34; 203-5, 208, 210, 211, 214, 215, 218, 220-24
 Nomura, T., 50, 56
 Nossal, G. J. V., 18, 30, 35
 Notani, G., 134
 Novak, D. R., 127
 Novick, A., 135, 140
 Novick, R. P., 257-59, 264
 Novy, M. J., 50, 55, 56
 Nowarski, G., 58
 Noyes, A., 50
 Nute, P., 49
 Nyc, J. F., 126, 127
- O
- Oaks, A., 127
 Ochoa, S., 139
 Oda, K. I., 161
 O'Daly, J. A., 4
 Oemijati, S., 49
 Oeschger, M., 243
 Ogata, C., 262-64
 Ogawa, M., 7, 16, 28
 Ogawa, T., 165
 Ohashi, M., 173
 Ohba, Y., 48, 50, 57
 Ohki, M., 259, 262, 263
 Ohms, J., 6, 16, 28, 29
 Ohms, J. J., 5, 17, 26, 35
 Ohnishi, Y., 215
 Ohshima, Y., 140
 Ohta, Y., 47, 50
 Ohtsubo, E., 259-61
 Oishi, A., 235, 244
 Oishi, M., 206-9, 235, 244
 Okada, T. A., 72, 75, 85, 90, 91, 93, 97, 99, 104
 Oliver, C. P., 49
 O'Neill, D. M., 206, 207, 217
 Opfell, R. W., 50
 Oppenheim, A. B., 175, 178
 Orgel, L. E., 113, 140
 Orrias, E., 239, 240
 Orrias, T., 210
 Osawa, S., 206, 212, 216, 217, 220, 221
 Oseki, H., 248
 Osgood, E. E., 50
 Oski, F. A., 49, 54
 Osserman, E. F., 6, 16, 29
 Ostertag, W., 47, 48
- O'Sullivan, A., 209
 Otaka, E., 216, 220
 Oudin, J., 23, 30
 Overby, L. R., 259
 Owen, M. C., 50
 Ozaki, M., 210, 211, 215, 222, 223
 Ozeki, H., 262, 263
- P
- Pacchetti, G., 247
 Pace, B., 204, 224
 Pace, N. R., 204, 207, 208, 224
 Paddock, G., 236
 Padmanaban, G., 120
 Page, D., 6
 Pall, M. L., 121
 Palm, W. H., 7
 Parchman, L. G., 74, 90, 101-3
 Pardee, A. B., 140
 Parer, J. T., 50, 51, 56
 Parkhouse, R. M. E., 29
 Parks, J. S., 139, 141
 Parson, J. W., 121
 Partridge, C. W. H., 113, 114
 Pastan, I., 137, 138, 147
 Pato, M. C., 257
 Pato, M. L., 207, 208
 Paul, C., 7, 16, 28
 Paul, W. E., 37
 Pauling, L., 58
 Peacock, A. C., 205
 Penman, S., 250
 Pereira da Silva, L. H., 163, 169, 173, 175-78, 180
 Perkins, D., 127
 Perkins, F. O., 74, 89
 Perlmutter, R., 137, 138, 147
 Pernis, B., 23, 25, 30
 Pero, J., 180, 181
 Perrin, D., 122, 140
 Perutz, M. F., 47-49, 51-58, 58, 59
 Peterson, C. M., 59
 Pettijohn, D. E., 208, 252
 Pfahl, M., 149
 Pilumm, M. N., 7
 Phang, J. M., 143
 Phillips, C., 100
 Phillips, S. L., 204, 216, 217
 Piérard, A., 145
 Pik, C., 49
 Pilaraki, L., 163
 Pilz, C. G., 18
 Pinck, M., 237
 Pink, J. R. L., 1, 7, 16, 17, 22, 24, 26, 30
 Pink, R., 1, 28
 Pinkerton, T. C., 236
 Pirotta, V., 139, 141, 163
- Pitcher, S. E., 7
 Pittard, J., 146, 260
 Platt, T., 149
 Plunkett, G. E., 214
 Polacco, J., 117
 Pollack, Y., 139
 Ponstingl, H., 7
 Porter, K. R., 74
 Porter, R. R., 5, 7, 25, 26
 Potter, M., 22, 37
 Poulik, M. D., 6
 Power, J., 135, 142
 Prah, J. W., 6, 22-25, 29
 Prato, V., 48
 Predescu, C., 49
 Prescott, D. M., 124
 Press, E. M., 7, 22
 Pressman, D., 5, 18, 26, 36
 Preud'homme, J. L., 6, 29
 Priabadi, W., 49
 Price, J. M., 97, 98
 Primakoff, P., 252
 Printz, D. B., 117, 118
 Printz, M. P., 151
 Pritchard, R. H., 258
 Ptashne, M., 139, 141, 161, 163, 173, 176, 181, 182
 Puls, W., 214, 215, 223
 Purdom, I., 207
 Putman, F. W., 7, 16, 28
- Q
- Quagliarotti, G., 207
- R
- Rabideau, K., 142
 Rabinowitz, J. C., 139
 Rabinowitz, M., 236
 Radding, C. M., 161, 180
 Rahbar, S., 48, 50
 Raik, E., 50
 RajBhandary, U. L., 241, 242
 Ralph, P., 29
 Ranney, H. M., 48-50
 Rao, M. V. N., 124
 Rapport, E., 73, 92
 Ratzkin, B., 146
 Ravin, A. W., 210
 Ray, A., 5, 7
 Raymond, L. H., 59
 Reale-Scafati, A., 210
 Reed, C. S., 50
 Reeve, E. C., 211
 Reeves, R. H., 238, 241
 Reichardt, L., 170, 171, 175, 176, 178-83
 Reichel, W., 7
 Reid, P. J., 239
 Reinbold, J., 214, 215, 223
 Reiness, C. G., 137
 Reisfeld, R. A., 23

- Reissmann, K. R., 50, 56
 Rejman, E., 206
 Restrepo, A., 48
 Revel, M., 139
 Reyes, O., 248
 Reynolds, C. A., 48, 49
 REZNIKOFF, W. S., 133-56;
 136-38, 141, 143, 144, 146,
 147
 Rhoades, M., 184
 Rhoades, M. M., 89, 90
 Ricco, G., 48
 Rich, A., 29, 135, 235
 Richardson, S. N., 59
 Richie, D. A., 197
 Richmond, M. H., 258, 262,
 264
 Riddle, D. L., 238, 243,
 244
 Rieder, R. F., 49, 51, 54
 Riggs, A., 49, 50, 55, 56
 Riggs, A. D., 104, 137, 139,
 140, 143, 149
 Rinaldi, G., 216
 Rines, H. W., 113, 118,
 119
 Ringelmann, B., 49, 50
 Ritossa, F., 204
 Ritossa, F. M., 207, 235
 Rivat, C., 16, 21
 Rivat, L., 16, 21
 Riyasat, S., 243
 Roberts, J. W., 138, 174,
 194, 196
 Roberts, L. M., 211
 Roefs-Grippa, J., 24
 Roholt, O. A., 5, 28
 Ropartz, C., 16, 21
 Ross, J., 48, 50
 Rose, J. K., 138
 Rossen, J. M., 72, 88, 89
 Rosset, R., 204-6, 212, 215,
 223
 Rossi-Bernardi, L., 53,
 59
 Roth, J. R., 111, 115, 141,
 238, 241, 243-46
 Roth, T. F., 72, 74, 90, 92,
 94, 101-3
 Rotheim, M. B., 210
 Rouvière, J., 134, 139
 Row, D. S., 16
 Rudland, P. S., 139
 Rudner, R., 206
 Ruffle, J., 50
 Ruffilli, A., 22
 Ruizman, B., 237
 Runner, M. H., 237
 Rupp, W. D., 257, 259
 Russell, R. L., 204, 246-48,
 251
 Ruth, W. E., 50,
 56
 Rutishauser, U., 7
 Ryan, A. M., 252
 Ryan, J. L., 235
 Ryter, A., 257
- S
 Sabatini, D. D., 71
 Sadler, J. R., 136, 140,
 143, 148, 150, 151
 Saito, T., 224
 Sakakibara, Y., 161
 Salser, W., 197, 239
 Sanchez, C., 135, 143
 Sanders, B. G., 16, 32
 Sanderson, K. E., 210,
 245
 Sanger, F., 204
 Sansone, G., 49
 Santi, D. V., 144
 Sargent, M., 125
 Sargent, M. L., 125, 127
 Sarid, S., 236, 251, 252
 Sarma, P. S., 120
 Sato, K., 135
 Sato, S., 199, 262-64
 Scalfi, J., 258
 Scalfi, J. G., 135-37, 143,
 147
 Schaupe, H. W., 223
 Schekman, R., 174
 Scherberg, N. H., 236
 Schlechl, H., 7, 17
 Schultz, E., 214, 215,
 223
 Schleif, R., 144, 158
 Schleif, R. F., 209
 Schlessinger, D., 198, 204,
 210, 214, 216-18, 221, 224
 Schneider, R. G., 48-50
 Schöns, M., 173, 259
 Schrantz, J.-P., 73, 79, 85,
 88
 Schubert, D., 29
 Schuit, H. R. E., 18
 Schulenburg, E. P., 7,
 23
 Schwartz, D., 137
 Schwartz, H. C., 49
 Schwartz, J., 7
 Schwartz, J. H., 134
 Schwartz, M., 142, 144,
 172, 173
 Schweiger, M., 195, 196
 Schweizer, E., 235
 Scott, J. R., 159
 Scott, J. V., 186
 Scott, W. A., 124, 127
 Seale, T., 114
 Sechaud, J., 183
 Sederoff, A., 158, 159
 Sekiya, T., 245
 Sela, M., 36
 Seligmann, M., 6, 29
 Sell, S., 23, 25
 Sen, S. K., 74, 97, 101,
 102
 Sharp, P. A., 264, 265
 Shatkin, A. J., 124
 Shaw, E. J., 258, 262, 264
 Sheehan, D. N., 124, 125
 Sheldrick, P., 161
- Shepard, M. K., 59
 Shepherd, W. M., 237
 Sheppard, D., 144
 Sheridan, W. F., 99, 102
 Sherman, F., 244
 Shibata, S., 48-51, 57
 Shih, T. B., 50
 Shimizu, A., 7, 16, 28, 48-
 50, 57
 Shimizu, M., 224
 Shinaki, N., 51
 Shinoda, T., 7
 Shinton, N. K., 49
 Shooter, E. M., 47, 60
 Shortle, B. E., 151
 Shreffler, D. C., 37
 Shultz, G., 59
 Sibatani, A., 220
 Sick, K., 49-51
 Siegel, R. B., 191-93, 196,
 197
 Signer, E. R., 136, 161, 165,
 169, 173, 183, 239
 Silbert, D. F., 141, 246
 Silengo, L., 218
 Silverman, P. M., 260,
 261
 Silverstone, A. E., 137, 147
 Simarov, B. V., 244
 Siminovitch, L., 175
 Simms, E. S., 7, 23
 Singer, C. E., 141
 Singer, M. F., 198
 Singer, S. J., 16, 32, 58
 Sjöstrand, F. I., 71
 Skalka, A., 161, 171
 Skogerson, L. E., 216
 Slaughter, C., 121
 Slayman, C. W., 126, 127
 Slonim, Z., 175
 Sly, W. S., 142, 163, 165,
 176-78, 181
 Smith, C., 204
 Smith, D. W. E., 236
 Smith, E. W., 47, 48
 Smith, G. P., 1, 7, 28,
 34
 Smith, G. R., 141, 142, 185,
 186
 Smith, H. O., 150, 185
 Smith, I., 204, 206-10, 215,
 216, 235, 244
 SMITH, J. D., 235-56; 204,
 236-40, 246-48, 251, 252
 Smith, L. L., 48-50
 Smith, M., 50
 Smith, S. M., 262, 263
 Smith, T. F., 136, 143, 148,
 150, 151
 Smith, W. K., 22
 Smithies, O., 6, 16, 21, 28,
 29
 Smith-Keary, P. F., 38
 Snapper, I., 6, 18
 Soffer, R. L., 225
 Sogin, M., 205, 224
 Sogo, J. M., 74

AUTHOR INDEX

- Solari, A. J., 75, 76, 81-86, 89, 93-97
 Soll, D., 235, 239, 250, 252
 Soll, L., 204, 238-42
 Soller, A., 176, 178
 Solomon, A., 16, 29
 Somerville, R. L., 146
 Sorger, G. J., 120
 Sorsoli, W. A., 120
 Sotelo, J. R., 71, 72, 75, 88, 89
 Spadari, S., 204
 Sparling, P. F., 210, 216, 224
 Sparrow, A. H., 74, 89
 Speirs, J., 207
 Spencer, H. H., 48
 Spencer, J. H., 252
 Speyer, J. F., 210
 Spiegelman, S., 134, 139, 235, 259
 Spiegelman, W. G., 161, 163, 174, 176, 181, 204
 Sprent, J., 37
 Sprinzl, M., 205
 Squires, C., 144, 238, 242, 243
 Srb, A. M., 127
 Srinivasan, P. R., 197
 Stacey, K. A., 263
 Stamato, T. D., 208, 252
 STAMATOYANNOPOULOS, G., 47-70; 49-51, 54-57
 Stark, B. P., 147, 148
 Starlinger, P., 184
 Stavnezer, J., 29
 Steadman, J. H., 50
 Steers, E., 144
 Steinberg, A. G., 21
 Steinberg, R., 163, 182
 Steinmetz-Kayne, M., 7
 Steitz, J. A., 139
 Stent, G. S., 209
 Stern, H., 100-5
 Stetson, C. A., 58
 Stevens, W., 173
 Stevens, W. F., 173
 Steward, M. W., 24, 29
 Stewart, J. W., 244
 Stock, J. J., 100
 Stocker, B. A. D., 262, 263
 Stockert, J. C., 74, 75, 87, 93, 99
 Stocklen, Z., 48
 Stöffler, G., 214, 215, 223
 Strack, H. B., 161, 169
 Strand, M., 259
 Stringini, P., 210
 Studier, F. W., 191, 192, 194, 196, 197
 Subak-Sharpe, H., 237
 Subak-Sharpe, J. H., 237
 Subramanian, K. N., 120
 Sueoka, N., 206, 209, 210, 215, 216, 218, 235, 237, 241, 244
 Sumida, I., 47
 SUMMERS, W. C., 191-202; 134, 135, 191-94, 196-99
 Sundaraligam, M., 151
 Sundaram, T. K., 119
 Surdin-Kerjan, Y., 111
 Sussman, A. S., 125
 Sussman, R., 165, 169
 Sutherland, E. W., 137
 Suzuki, H., 50
 Suzuki, T., 48-50, 57
 Svensson, B., 50
 Swenson, R. T., 48, 49
 Sykes, R. B., 258, 262, 264
 Syndenstricker, V. P., 58
 Sypherd, P. S., 206, 207, 217
 Szelenyi, J. G., 48
 Szenberg, A., 18, 30
 Szentirmai, A., 145
 Szentirmai, M., 145
 Szybalski, W., 137, 147, 148, 161, 173, 174, 180, 181, 192, 197, 252
- T
- Tabara, K., 49
 Tai, P. C., 204, 222
 Tagagi, N., 18, 36
 Takahashi, M., 18, 36
 Takano, T., 199, 263
 Takata, R., 206, 215-17
 Takatsuki, I., 6, 29
 Takeda, I., 48, 49, 210
 Takeishi, K., 245
 Takenaka, H., 50
 Talens, J., 139
 Talmage, D. W., 1, 28, 31
 Tamaki, M., 216
 Tanaka, N., 216
 Tanaka, Y., 211
 Tanemura, S., 236, 243
 Tanford, C., 31
 Tangheron, W., 48
 Tatum, E. L., 118, 124, 127
 Taylor, A. L., 220, 225
 Taylor, J. H., 72, 89
 Taylor, K., 161, 174
 Taylor, M. M., 206, 207, 217
 Taylor, R. B., 36, 37
 Ten Eyck, L., 51
 Teraoka, H., 216
 Terhorst, C., 225
 Terry, K., 120
 Terry, W. D., 6, 7, 16, 21, 28, 29
 Tewari, K. K., 236
 Thiéry, J. P., 56
 Thomas, C. A., Jr., 158, 184, 197, 207
 Thomas, R., 161, 163, 168, 173, 175, 210
 Thompson, R. B., 60
 Tillak, T. W., 236
 Ting, Y. C., 74, 89, 97
 Tischendorf, M. M., 16, 17
 Tischendorf, R. W., 16, 17
 Titani, K., 7
 Tocchini-Valentini, G. P., 218
 Todd, C. W., 23-25, 29
 Toh-E, A., 126
 Tomizawa, J., 159
 Tomizawa, J.-I., 161, 165, 259
 Tomkins, G. M., 135
 Toussaint, A., 161
 Traub, P., 205, 210, 222-24
 Traut, R. R., 203
 Travers, A. A., 208, 209
 Tres, L. L., 75, 76, 82, 83, 86, 94
 Trevithick, J. R., 124
 Trotter, C. D., 195, 196
 Tsugita, A., 48
 Tuchinda, S., 48, 49
 Turian, G., 120
 Turner, J. R., 120
 Turnock, G., 224
 Twardzik, D. R., 245
- U
- Udem, L., 48, 49
 Ueda, S., 48-51
 Ukita, T., 245
 Ulenurm, L., 48
 Ullmann, A., 136, 137, 210
 Umbarger, H. E., 133, 145, 146, 246
 Underbrink, A. G., 74, 89
 Ureña, F., 75, 94
 Urey, J. C., 127
 Uy, R., 49
- V
- Vaerman, J.-P., 16, 22
 Valentine, R. C., 259-61
 Valone, J. A., Jr., 118, 119, 123
 Van der Loo, W., 24
 Van Furth, R., 18
 Van Ros, G., 48
 Vapnek, D., 257, 259
 Vasil, J. K., 73
 Vella, F., 48, 49
 Venetianer, P., 135, 143
 Venkov, P., 224
 Vergoz, D., 48
 Vermeer, C., 139
 Vermeulen, C. W., 204, 206
 Vickers, T. G., 251
 Vogels, H. J., 133

- Vola, C., 223
 Volkin, E., 134
 Voll, M. J., 137
 Volz, P. A., 73
 von der Haar, F., 235
 von Hippel, P. H., 149, 151
 von Meyenberg, K., 207, 208
 von Stosch, H. A., 73
VON WETTSTEIN, D., 71-110; 71-74, 77, 79-81, 86, 88-93, 98-100, 104, 105
 Voynow, S., 210, 217
- W**
- Wade, P. T., 49
 Wagner, E. K., 237
 Wagner, R. P., 127
 Wajcman, H., 50
 Walker, E. M., 260
 Walton, G. M., 225
 Wang, A-C., 1, 7, 16, 17, 28, 30
 Wang, C. C., 49, 50
 Wang, C. L., 50
 Wang, T., 217
 Ward, C. B., 209
 Warner, N. L., 37
 Warrington, R. L., 60
 Waskell, L., 192, 193
 Watanabe, S., 7, 17
 Watanabe, T., 199, 262-64
 Watari, H., 50
 Watson, H. C., 48, 49, 52
 Watson-Williams, E. J., 50
 Weatherall, D. J., 47-50, 59, 60
 Weber, C. S., 207, 208, 235
 Weber, K., 140
 Webster, R. E., 116, 239, 241
 Weed, R. I., 55
 Weeks, C. O., 117
 Weigert, M. G., 7, 17, 23, 32, 239
 Weigle, J., 168
 Well, J., 165, 183
 Weinberg, R. A., 250
 Weisberg, R. A., 161, 165
 Weissblum, B., 216, 224
 Weiss, S. B., 139, 236
 Wells, B., 71, 74, 89, 90, 91, 98, 99
 Wells, I. C., 58
 Wells, K., 73
 Wells, R. D., 149, 151
 Weng, M. I., 49
- Wensink, P. C., 197, 207, 208
WESTERGAARD, M., 71-110; 71-73, 77, 79-81, 88-93, 99, 100, 104, 105
 Wettstein, R(chard), 72
 Wettstein, R(olodolfo), 71, 75, 88, 89
 White, J. G., 58
 White, J. M., 50, 55
 White, J. R., 210
 Whitehouse, H. L. K., 28
 Whitley, E., Jr., 7
 Wlame, J. M., 145
 Wikler, M., 7
 Wilcox, G., 144
 Wildman, S. G., 236
 Wilhelms, R. C., 239
 Wilkie, N. M., 237
 Wilkins, B. M., 263
 Wilkins, M. H. F., 150
 Wilkinson, J. M., 5, 7, 24, 26, 35
 Willard, M., 163, 184
WILLETS, N., 257-68; 257-59, 260-64
 Williams, L., 199
 Williams, L. G., 112
 Williams, L. S., 145
 Williamson, A. R., 18, 29
 Willson, C., 122, 140
 Wilson, D. B., 146
 Wilson, J. B., 48-50
 Wilson, J. H., 236
 Wilson, S. K., 30
 Wiltshire, B. G., 50
 Winterhalter, K. H., 30, 55
 Wittmann, H. G., 210, 211, 215
 Wittmann-Liebold, B., 215
 Woese, C. R., 205, 224
 Wohl, R. C., 51
 Wolf, B., 209
 Wolf, P. L., 59
 Wollman, E., 191
 Wollman, E. L., 157, 165, 188
 Wong, H. B., 80
 Woodland, H. R., 29
 Woodward, D. O., 120, 125, 127
 Wool, I., 225
 Wootton, J. F., 53
 Work, T. S., 236
 Wright, C. S., 48
 Wrightstone, R. N., 48, 50
- Wu, A. M., 148, 163, 184
 Wu, T. T., 17
 Wulff, D. L., 183, 184
 Wyche, J. H., 143
 Wyman, J., 52
- Y**
- Yagi, Y., 18, 36
 Yakulis, V., 50
 Yakulis, V. J., 18
 Yamada, K., 51
 Yamada, T., 210, 211, 215
 Yamamoto, K., 48, 50, 57
 Yamamoto, M., 238
 Yamamura, Y., 48-50
 Yamaoka, K., 47, 49
 Yamazaki, H., 209
 Yanase, T., 47, 50
 Yang, H. J., 49, 50
 Yankofsky, S. A., 204
 Yanofsky, C., 134, 135, 138, 198, 241, 242
 Yarmolinsky, M. B., 165
 Yates, A., 50
 Yonkovich, S. J., 7, 17, 23, 32
 Yoshida, A., 50, 51, 54-56
 Yoshida, M., 245
 Yoshikawa, H., 209
 Yot, P., 237
 Young, G. O., 23, 24
 Young-Cooper, G. O., 24
 Yourno, J., 236, 243
 Yu, M. T., 204, 206
 Yu, S.-A., 125
 Yudelevich, A., 237
 Yuki, A., 224
- Z**
- Zabin, I., 144
 Zadrazil, S., 238-40, 246-48
 Zalusky, R., 49
 Zangrossi, S., 247
 Zarriego, M. H., 31
 Zeuthen, P., 257
 Zichichi, M. L., 168
 Zickler, D., 124
 Zillig, W., 146
 Zimmerman, E. J., 120
 Zimmerman, R. A., 212, 215
 Zinder, N. D., 134, 239, 241
 Zipser, D., 241
 Zissler, J., 165
 Zitomer, R., 214, 217
 Zorcolo, G., 48
 Zubay, G., 133, 137, 144, 251

SUBJECT INDEX

A

Allelic exclusion in immunoglobulin production in heterozygotes, 18, 19
Amino acid deletions in hemoglobin variants, 51
Amino acid sequences of immunoglobulins, 7-17
Amino acids as repressors of own biosynthesis, 117, 118
Amino acid substitutions in hemoglobin variants, 48-50
Antibody diversity unsolved problem of, 1
Antibody formation clonal selection theory of, 17-20
Antigen-binding site structure of, 5
Arom mutants of *Neurospora* genetic control of, 115 pleiotropic effects of, 114, 115
Arom system of *Neurospora*, 113-16 complementation behavior of genes within, 113, 114

B

B. subtilis map of rRNA and ribosomal protein genes, 213 mapping of rRNA genes in, 206
Bacterial ribosomes assembly defective mutants of, 221-24 genetics of, 203-25 genetics of assembly of, 221-24
Bence Jones protein, 6, 21
Bruton's agammaglobulinemia, 36

C

Clonal selection theory of antibody formation, 17-20 Conditional lethal mutants of ribosome assembly genes in *E. coli*, 221-24 Crossing-over role of synaptonemal complex in, 105 unequal as mechanism of origin of

translocons, 32, 33
Cyanate in treatment of sickle cell crisis, 59

D Developmental pathways for the temperate phage, 157-87

DNA as constituent of synaptonemal complex, 98, 99 of plasmids, 259 unique centers for recognition by repressor, 149-52
DNA binding protein in eukaryotes, 106
DNA replication as requirement for formation of synaptonemal complex, 101
Drosophila tRNA genes of, 235

E

E. coli cold-sensitive ribosome assembly mutants, 221-24
ery locus of, 216
fus locus of, 216
glycine tRNA genes of mutations in as missense suppressors, 241-43
map of location of suppressor genes, 240
map of rRNA and ribosomal protein genes, 212
mapping of rRNA genes, 206, 207
properties of amber and ochre suppressors, 238-41
ram locus of, 215
rRNA genes heterogeneity of, 204, 205
spcA locus of, 215
str-D strains revertants of, 214, 215
str locus effect of mutants of, 210-14
su 3 tyrosine tRNA amber suppressor, 246-52
Effector in operon system, 144,

translocons, 32, 33
Episomes and phage growth inhibition, 199

Erythromycin-resistant mutants, 216
Euglena gracilis tRNAs of, 236

F

F episome and inhibition of heptoid phages, 199
F factor of *E. coli* see Plasmids
Frameshift mutations suppressors of, 243, 244
Fusidic acid-resistant mutants, 216

G

Gene clusters in *Neurospora*, 112, 118
Genetic regularity systems in *Neurospora*, 111-28

H

HeLa cells tRNA genes of, 235
Hemoglobin abnormal variants in thalassemia, 59, 60 structure-function relationship in abnormal molecules, 53, 54 structure-function relationships of normal molecule, 52, 53
Hemoglobin disease due to instability of variant molecule, 54, 55 due to mutants with abnormal oxygen affinity, 55-57 molecular basis of, 47-61
Hemoglobin M disease, 57
Hemoglobin mutants, 47-51
Hemoglobin S, 57-59 frequency of electrophoretic variants, 51 tactoid formation mechanism of, 58
Hemoglobins of man normal structure, 47
Heptoid phages control of host transcription, 197 early to late switch in tran-

- scription, 191-93
inhibition by F episome, 199
initiation and termination of transcription in, 193-97
stability of RNA of infected cell, 197, 198
see also, Phi (φ) II phage, T3 phage, T7 phage
- his operon
see Operon
- Histidine operon
regulation of in *Salmonella*, 245, 246
- Histidinyl tRNA, 245, 246
- Histocompatibility genes, 36, 37
- Homology of immunoglobulins, 7-17
- Human immunoglobulins
see Immunoglobulins of man
- Human synaptosomal complex
see Synaptosomal complex of man
- I**
- Immune response genes, 36, 37
- Immunogenetics, 20-27
- Immunogenetics genes
evolutionary pathway of, 32-35
- Immunoglobulin genes
arrangement of
in man, 21, 22
in mouse, 22, 23
in rabbit, 23-27
- Immunoglobulin molecules
clone type of, 20
primotype of, 20
- Immunoglobulin synthesis
allelic exclusion in heterozygotes, 18, 19
factors controlling, 35-37
genetic control of, 1-38
- Immunoglobulin structure, 3-17
- Immunoglobulins of man
amino acid sequences of, 7-17
classes and summary of properties, 3-5
gene duplication and evolutionary origin of C genes, 16
genetic markers of, 21, 22
in normal and pathological states, 6
variable and constant regions, 7-17
- Intergeneric crosses
use of in mapping rRNA genes, 206, 207
- Interspecies crosses
use of in mapping rRNA genes, 206, 207
- L**
- lac operon of *E. coli*
see Operon
- lac region of *E. coli* chromosome, 134
- M**
- Mitochondria
tRNA of, 236
- Molecular basis of hemoglobin disease, 47-61
- Molecular basis of regulation, 146-52
- Mouse immunoglobulins
genetic markers of, 22, 23
- mRNA
degree of instability of various species of, 134, 135
termination site in operon, 137, 138
- Myeloma
experimental induction in mice, 6
- Myeloma globulins, 5-7, 18, 21
inability of rabbits to synthesize, 25
- N**
- Neurospora
arom system in, 113-16
control of carboxylases in, 124, 125
control of nucleases in, 126
control of phosphatases in, 126, 127
derepression in, 113
endogenous induction of LEU mutants, 116, 117
inducible enzyme systems of, 120, 121
gene clusters in, 112-15
genetic regulatory systems in, 111-28
- LEU system of, 116, 117
nucleus-limited control substances in, 123, 124
- quinic acid system
regulation of, 118-20
- sulfur metabolism
repression control of, 121-24
- temperature-conditional mutants at cys-3 locus, 122
- O**
- Operator
binding site for repressor, 143, 144
- Operon, 133-52
- effector**
mode of action of, 144-46
- functional control of by repressor, 139-43
- functional polarized grouping of structural genes in, 134
- mechanism of protein-DNA recognition reactions, 149-52
- multi-effector systems, 145, 146
- promoter, 135-37
- structure and function of repressor, 149
- structure of lac operator, 148, 149
- terminator, 137, 138
- transcription blockage, 147, 148
- transcription initiation, 146, 147
- Operons
in eucaryotes, 111-13
- P**
- Phage
see Temperate phage
- Phage λ
activation of cl gene, 169-71
- cl protein
mechanism for continued synthesis of, 174-76
- cII and cIII proteins
possible molecular mechanism for regulation by, 171, 172
possible site of action of, 171
- cro gene
genetic analysis of, 176-78
- cro gene product
effect on cl gene, 180, 181
possible sites of action of, 181, 182
- establishment of repression by, 168-86
antagonistic effect of cro gene product, 176-82
role of cII and cIII proteins, 168-72
- excision of viral DNA from host DNA, 165, 166
- integration of viral DNA into host DNA, 165, 166
- life cycle
summary of, 167, 168
- lysogenic pathway choice
environmental effects, 183
host influences, 183, 184
- lysogeny
maintenance of, 162-67
- lytic pathway of, 161, 162

SUBJECT INDEX

- maintenance of repression by *cI* protein, 172-76
repression establishment of, 163-65
release of, 165
repression of *cI* protein synthesis mechanism of, 178-80
repression of lytic genes by *cII* and *cIII* proteins, 169
see also Temperate phage
- Phage P2 lysogenic pathway of, 186
- Phage P22 lysogenic pathway of, 184-85
- Phi II phage regulation of RNA metabolism of, 191-200
see also *Heptoid* phages
- Plasmid-determined pili classes of, 259
- Plasmid incompatibility groups, 258, 259, 262, 264
- Plasmid replication role of chromosomal genes in, 257, 258
temperature-sensitivity of, 257, 258
- Plasmids complementation analysis of, 260, 261
deletion mapping of *tra* cistrons of, 261
determinants for conjugation, 259-64
determinants for replication of, 257-59
DNA transfer by, 259
genetics of, 257-65
initiation of pair formation by, 259
mutations for replication of, 258
promotion of host chromosome transfer by, 263, 264
surface exclusion caused by, 262
transfer deficient (*Tra*⁻) mutants of, 260, 261
transfer inhibition due to mutations in, 262, 263
- Polypeptide chains of immunoglobulins of man, 3-5
- Precursor tRNAs, 250, 251
- Promoter localization of in operon, 136, 137
- Protein-DNA recognition reactions in operon, 149-52
- Proteins as constituents of synaptosomal complex, 99-103
- R
- Rabbit immunoglobulins
- genetic markers of, 23-27
Regulation of gene expression, 138-46
of histidine operon of *Salmonella*, 245, 246
molecular basis of, 146-52
of ribosomal protein genes in bacteria, 219-21
see also Bacterial ribosomes, Phage λ , Temperate phage
- Regulator gene, 142, 143
- Regulatory mechanisms in eucaryotes, 111
in *Neurospora*, 111-27
- Regulon, 135
- Repressor, 138-43
structure and function of, 149
- Repressor-operator interaction
molecular model of, 151, 152
- Ribosomal protein genes, 209-19
coordinated expression of, 219-21
expression of as related to rRNA gene expression, 220, 221
mapping by strain- or species-specific ribosomal protein differences, 217
mutant phenotypes of, 210
mutation frequency, 218, 219
regulation of, 219-21
- Ribosomal proteins interactions among, 217, 218
structural genes for, 209-19
- Ribosome assembly genes for post-transcriptional modification of, 224, 225
- Ribosomes see Bacterial ribosomes
- RNA as constituent of synaptosomal complex, 99, 101
- RNA metabolism regulation of in *T7* and related phages, 191-200
- RNA synthesis in *heptoid* phages early to late switches, 193
- rRNA genes expression of as related to ribosomal protein gene expression, 220, 221
- of *B. subtilis*, 207-9
of *E. coli*, 208, 209
fine structure organization of, 207, 208
heterogeneity of, 204, 205
mapping of, 205-7
of *Proteus mirabilis*, 207
redundancy of, 204
regulation of expression of, 208, 209
of *Serratia marcescens*, 207
of *Xenopus*, 208
- S
- Salmonella*
regulation of histidine operon in, 245, 246
- S. typhimurium*
cold-sensitive ribosome assembly mutants, 221-24
- Sickle cell anemia
see Hemoglobin S
- Sickling crisis treatment of with cyanate, 59 with urea, 59
- Spectinomycin resistant mutants, 215
- Streptomycin-resistant mutants of *E. coli*, 210-14
- Structural genes expression of, 133-38
functional polarized grouping of in operon, 135
- Suppressor tRNAs, 237-45
in eukaryotes, 244, 245
- Suppressors of frameshift mutations, 243, 244
- Synaptonemal complex, 71-106
and achiasmatic meiosis, 94
of asynaptic and desynaptic mutants, 97, 98
and chiasma formation, 92, 93, 105, 106
of chromosomal aberrations, 96
in desynaptic mutant of barley, 97
at diplotene and later stages of meiosis, 93, 94
of heteroploids, 96, 97
at leptotene, 90, 91
of man, 72, 75, 76, 82, 83
and meiotic metabolism, 100-3
methodology for investigation of, 71, 72
molecular composition of, 98-100
of mouse, 86
at pachytene, 72-89

- reports on, 1969-1971, 72
role of in zygote pairing, 104
of sex chromosomes, 94-96
structure and dimensions of, 73-75
at zygote, 91, 92
- T**
- T-cells
role in immunoglobulin synthesis, 36, 37
- T3 phage
regulation of RNA metabolism of, 191-200
- see also *Heptoid phages*
- T7 phage
regulation of RNA metabolism of, 191-200
- stability of mRNA of, 134, 135
- see also *Heptoid phages*
- Temperate phage
developmental pathways for, 157-87
- life cycle of, 157, 158
- lysogenic response
essential features of, 159, 160
reversal of, 160
- lysogeny
evolutionary basis, 158
- lytic growth
essential features of, 158, 159
- Temperature-conditional cys-3 mutant of *Neurospora*, 122
- Termination site
in operon, 137, 138
- Thalassemia, 59, 60
- Transcription
initiation site in operon, 135-37
mechanism of blockage by repressor, 147, 148
mechanism of initiation of, 146, 147
and regulation of gene expression, 139
of tRNA genes, 250-52
- Transfer RNA
see tRNA
- Translation
and regulation of gene expression, 139
- Translocon
properties of, 2
- Translocon hypothesis, 2
- Translocon-like mechanism as explanation of mutable loci, 38
- Translocon model of immunoglobulin genes
evidence for
from rabbit genetic markers, 28, 30
from structure of "abnormal" Ig chains, 29
from structure of normal human Ig chains, 28, 29
from "switchover" events, 30
- in normal human germ cell, 27, 28
- Translocons
evolution of, 32-35
factors affecting expression of, 35-37
and origin of diversity, 30-32
- Transmissible plasmids
see Plasmids
- tRNA
genetics of, 235-52
in mitochondria, 236
mutants of
genetic analysis, 246-50
virus specified, 236, 237
- tRNA genes
distribution on bacterial chromosome, 244
in *Drosophila*, 235
in *HeLa* cells, 235
redundancy of, 235, 236
transcription of
in vitro, 251, 252
post-transcriptional events, 250-52
in *Xenopus*, 235
- tRNAs
precursors of, 250, 251
restrictions of anticodon change, 245
suppressors of
UAG and UAA codons, 238-40
UAA/UAG codons, 240, 241
UGA codon, 241
- trp operon
see Operon
- U**
- Urea
in treatment of sickle cell crisis, 59
- X**
- Xenopus**
tRNA genes of, 235

CUMULATIVE INDEXES

VOLUMES 2-6

INDEX OF CONTRIBUTING AUTHORS

A
 Astaurov, B. L., 3:99
 Auerbach, C., 5:163

B
 Bearn, A. G., 2:341
 Berg, K., 2:341
 Bonhoeffer, F., 3:233
 Boyse, E. A., 3:269
 Brown, D. D., 3:127
 Buettnner-Janusch, J., 4:47

C
 Carr, D. H., 5:65
 Clever, U., 2:11

D
 da Cunha, A. B., 3:425
 Darlington, G. A., 2:141
 Davies, J., 6:203
 Dawid, I. B., 3:127
 Dove, W. F., 2:305
 Drake, J. W., 3:247

E
 Echois, H., 6:157
 Edelman, G. M., 6:1
 Emerson, S., 5:1

F
 Fincham, J. R. S., 4:347
 Fogel, S., 5:219
 Fristrom, J. W., 4:325

G
 Gabor, M., 4:193
 Galinat, W. C., 5:447
 Gally, J. A., 6:1
 Gartner, S. M., 5:143
 Georgiev, G. P., 3:155
 Goodenough, U. W., 4:397
 Gorini, L., 4:107
 Green, E. L., 2:87
 Gross, S. R., 3:395

H
 Harris, H., 5:5
 Hartwell, L. H., 4:373

Henderson, S. A., 4:295
 Herzenberg, L.(eonard) A.,
 2:209
 Herzenberg, L(eonore) A.,
 2:209
 Holloway, B. W., 5:425
 Hooker, A. L., 5:407
 Hopkinson, D. A., 5:5
 Hotchkiss, R. D., 4:193

I
 Ikeda, H., 2:245

J
 Joklik, W. K., 5:297

K
 Kerr, W. E., 2:413
 Kilby, B. J., 5:163
 Knudson, A. G., Jr., 3:
 1
 Krishnapillai, V., 5:425
 Krooth, R. S., 2:141
 Kubai, D. F., 4:263
 Kulinčević, J. M., 2:413

L
 Levine, M., 3:323
 Levine, R. P., 4:397
 Levins, R., 4:469
 Libby, W. J., 3:469
 Lin, E. C. C., 4:225
 Livingstone, F. B., 5:33
 Lucchesi, J. C., 2:53
 Luria, S. E., 4:177
 Lyon, M. F., 2:31

M
 MacCluer, J. W., 2:279
 Mikell, P. H., 3:291
 Martin, D. W., Jr., 4:91
 Martin, R. G., 3:181
 McClearn, G. E., 4:437
 McDevitt, H. O., 2:209
 McKusick, V. A., 4:1
 Messer, W., 3:233
 Metzenberg, R. L., 6:
 111
 Mortimer, R. K., 5:219
 Morton, N. E., 3:53
 Moses, M. J., 2:363

N
 Nanney, D. L., 2:121
 Nathenson, S. G., 4:69
 Nesbitt, M. N., 5:143
 Nicoletti, B., 4:409
 Nomura, M., 6:203

O
 Ohno, S., 3:495
 Old, L. J., 3:269
 Ozeki, H., 2:245

P
 Pavan, C., 3:425
 Pontecorvo, G., 2:1
 Pratt, D., 3:343
 Preer, J. R., Jr., 5:361

R
 Radding, C. M., 3:363
 Renwick, J. H., 5:81
 Revel, H. R., 4:177
 Reznikoff, W. S., 6:133
 Ris, H., 4:263
 Rothenbuhler, W. C., 2:
 413

S
 Sammetta, K. P. V., 4:469
 Sandler, L., 4:409
 Saxena, K. M. S., 5:407
 Schull, W. J., 2:279
 Sears, E. R., 3:451
 Seitz, F. W., 3:469
 Sherman, F., 5:257
 Smith, J. D., 6:235
 Spiess, E. B., 2:165
 Stamatoyannopoulos, G., 6:
 47
 Stanisich, V., 5:425
 Steinberg, A. G., 3:25
 Stettler, R. F., 3:469
 Stewart, J. W., 5:257
 Stimpfling, J. H., 5:121
 Stocker, B. A. D., 3:291
 Summers, W. C., 6:191
 Susman, M., 4:135
 Suzuki, D. T., 2:53

T
 Thomas, C. A., Jr., 5:23

INDEX OF CHAPTER TITLES

285

Tomasz, A., 3:217	von Wettstein, D., 6:71	Witkin, E. M., 3:525
Tomkins, G. M., 4:91		
V	W	Z
Velazquez, A. A., 2: 141	Westergaard, M., 6:71 White, M. J. D., 3:75 Willetts, N., 6:257	Zimmering, S., 4:409 Zweerink, H. J., 5: 297

INDEX OF CHAPTER TITLES

VOLUMES 2-6

INTRODUCTORY CHAPTERS		
Life of Hermann Joseph Muller	G. Pontecorvo	2:1-10
Alfred Henry Sturtevant	S. Emerson	5:1-4
BACTERIAL GENETICS		
Transduction Mechanisms	H. Ozeki, H. Ikeda	2:245-78
Control of Gene Expression	R. G. Martin	3:181-216
Some Aspects of the Competent State in Genetic Transformation	A. Tomasz	3:217-32
Replication of the Bacterial Chromosome	F. Bonhoeffer, W. Messer	3:233-46
General Bacterial Genetics	M. Susman	4:135-76
DNA-Glucosylation in T-Even Phage: Genetic Determination and Role in Phage-Host Interaction	H. R. Revel, S. E. Luria	4:177-92
Bacterial Transformation, with Special Reference to Recombination Process	R. D. Hotchkiss, M. Gabor	4:193-224
<i>Pseudomonas</i> Genetics	B. W. Holloway, V. Krishnapillai, V. Stanisch	5:425-46
The Genetics of Transmissible Plasmids	M. Willets	6:257-68
BIOCHEMICAL GENETICS		
Genetics of Polysaccharide Biosynthesis	P. H. Mäkelä, B. A. D. Stocker	3:291-322
Genetics of Bacterial Transport Systems	E. C. C. Lin	4:225-62
Biochemical Genetics of Yeast	L. H. Hartwell	4:373-96
Genetics of Photosynthesis and of the Chloroplast in Chlamydomonas Reinhardi	R. P. Levine, U. W. Goodenough	4:397-408
Recent Work on Isozymes in Man	H. Harris, D. A. Hopkinson	5:5-32
Genetics and Biosynthesis of Cytochrome c	F. Sherman, J. W. Stewart	5:257-96
Genetic Regulatory Systems in Neurospora	R. L. Metzenberg	6:111-32
CHROMOSOME BEHAVIOR	S. A. Henderson	4:295-324
Time and Place of Meiotic Crossing-Over		
CHROMOSOME STRUCTURE		
Synaptonemal Complex	M. J. Moses	2:363-412
Chromosome Structure	H. Ris, D. F. Kubai	4:263-94
The Synaptonemal Complex	M. Westergaard, D. von Wettstein	6:71-110
DEVELOPMENTAL GENETICS		
Developmental Genetics	D. D. Brown, I. B. Dawid	3:127-54
Informational Suppression	L. Gorini	4:107-34
Mechanisms of Meiotic Drive	S. Zimmering, L. Sandler, B. Nicoletti	4:409-36
Applications of Genetic Mosaicism to Developmental Problems	M. N. Nesbitt, S. M. Gartler	5:143-62

INDEX OF CHAPTER TITLES

EXTRACHROMOSOMAL INHERITANCE		
Developmental Biology of <i>Drosophila</i>	J. W. Fristrom	4:325-46
Extrachromosomal Inheritance: Hereditary Symbionts, Mitochondria, Chloroplasts	J. R. Preer, Jr.	5:361-406
FUNGAL GENETICS		
Genetic Regulatory Mechanisms in the Fungi	S. R. Gross	3:395-424
Fungal Genetics	J. R. S. Fincham	4:347-72
Recombination in Yeast	S. Fogel, R. K. Mortimer	5:219-36
GENE MUTATION		
Mutagenic Mechanisms	J. W. Drake	3:247-68
Ultraviolet-Induced Mutation and DNA Repair	E. M. Witkin	3:525-52
Mutation in Eukaryotes	C. Auerbach, B. J. Kilbey	5:163-218
HUMAN GENETICS		
The Genetics of Cultured Mammalian Cells	R. S. Krooth, G. A. Darlington, A. A. Velazquez	2:141-64
Human Genetics: Structure of Population	W. J. Schulz, J. W. MacCluer	2:279-304
Human Serum Protein Polymorphisms	K. Berg, A. G. Bearn	2:341-62
Globulin Polymorphisms in Man	A. G. Steinberg	3:25-52
Human Genetics	V. A. McKusick	4:1-46
Malaria and Human Polymorphisms	F. B. Livingstone	5:33-64
Genetic Basis of Abortion	D. H. Carr	5:65-80
The Mapping of Human Chromosomes	J. H. Renwick	5:81-120
Recombination Within a Histocompatibility Locus	J. H. Stimpfling	5:121-42
The Genetic Control of Immunoglobulin Synthesis	J. A. Gally, G. M. Edelman	6:1-46
IMMUNOGENETICS		
Genetics of Antibodies	L. A. Herzenberg, H. O. McDevitt, L. A. Herzenberg	2:209-44
Some Aspects of Normal and Abnormal Cell Surface Genetics	E. A. Boyse, L. J. Old	3:269-90
Evolution of Serum Protein Polymorphisms	J. Buettnner-Janusch	4:47-68
Biochemical Properties of Histocompatibility Antigens	S. G. Nathenson	4:69-90
The Molecular Basis of Hemoglobin Disease	G. Stamatoyannopoulos	6:47-70
MAMMALIAN GENETICS		
Experimental Polyploidy in Animals	B. L. Astaurov	3:99-126
MOLECULAR GENETICS		
The Operon Revisited	W. S. Reznikoff	6:133-56
Genetics of Transfer RNA	J. D. Smith	6:235-56
POPULATION GENETICS		
Experimental Population Genetics	E. B. Spiess	2:165-208
Human Population Structure	N. E. Morton	3:53-74
Chromosomal Rearrangements and Speciation in Animals	M. J. D. White	3:75-98
PROTOZOAN GENETICS		
Ciliate Genetics: Patterns and Programs of Gene Action	D. L. Nanney	2:121-40
RADIATION GENETICS		
Genetic Effects of Radiation on Mammalian Populations	E. L. Green	2:87-120
RECOMBINATION		
The Genetic Organization of Chromosomes	C. A. Thomas, Jr.	5:237-56
REGULATION OF GENE AND CHROMOSOME FUNCTION		
Regulation of Chromosome Function	U. Clever	2:11-30
Chromosomal and Subchromosomal Inactivation	M. F. Lyon	2:31-52
The Interchromosomal Control of Recombination	J. C. Lucchesi, D. T. Suzuki	2:53-86
Histones and the Control of Gene Action	G. P. Georgiev	3:155-80
Hormones and Gene Expression	G. M. Tomkins, D. W. Martin, Jr.	4:91-106
VIRAL GENETICS		
The Genetics of the Lambda Phages	W. F. Dove	2:305-40
Phage Morphogenesis	M. Levine	3:323-42

INDEX OF CHAPTER TITLES

287

Genetics of Single-Stranded DNA		
Bacteriophages	D. Pratt	3:343-62
Genetic Control of Phage-Induced Enzymes	C. M. Radding	3:363-94
The Morphogenesis of Animal Viruses	W. K. Joklik, H. J. Zweerink	5:297-360
Developmental Pathways for the Temperate		
Phage: Lysis vs Lysogeny	H. Echois	6:157-90
Regulation of RNA Metabolism of T7 and		
Related Phages	W. C. Summers	6:191-202
SPECIAL TOPICS		
Bee Genetics	W. C. Rothenbuhler, J. M. Kulinčević, W. E. Kerr	2:413-38
Chromosomal Activities in Rhynchosciara and Other Sciaridae	C. Pavan, A. B. da Cunha	3:425-50
Wheat Cytogenetics	E. R. Sears	3:451-68
Forest Genetics and Forest Tree Breeding	W. J. Libby, R. F. Stettler, F. W. Seitz	3:469-94
Evolution of Sex Chromosomes in Mammals	S. Ohno	3:495-524
Behavioral Genetics	G. E. McClearn	4:437-68
Genetics and Ecology	K. P. V. Sammeta, R. Levins	4:469-88
Genetics of Disease Resistance in Plants	A. L. Hooker, K. M. S. Saxena	5:407-24
The Origin of Maize	W. C. Galinat	5:447-78
The Genetics of Bacterial Ribosomes	J. Davies, M. Nomura	6:203-34